

Indus River System



Indian River System

Based on source:

Himalayan Rivers

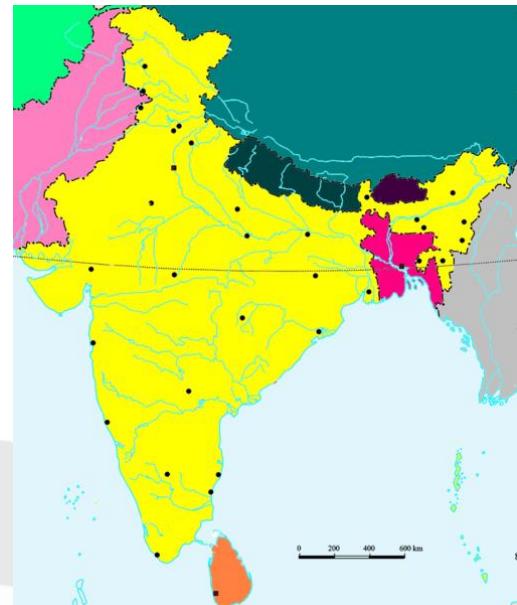
Peninsular Rivers

- **Himalayan Rivers:**

- Indus
- Ganga
- Brahmaputra

- **Peninsular Rivers**

- Into Arabian Sea
- Into Bay of Bengal



Himalayan Drainage System:

- Rivers of this system are fed both by melting of snow and precipitation and hence, are perennial.
- These rivers form V-shaped valleys, rapids and waterfalls in their mountainous course.
- While entering the plains, they form depositional features like flat valleys, ox-bow lakes, flood plains, braided channels and deltas near the river mouth.

Parcham Classes

Indus River

The Indus river is one of the world's largest river basins. It is also known as Sindhu. The river flows through China(Tibet region), India, and Pakistan. In Tibet, it is known as Singi Khambai or Lion's mouth.

Sindhu	Sanskrit
Sinthos	Greek
Sindus	Latin

- It originates from a glacier near **Bokhar Chu** in the Tibetan region at an altitude of 4,164 m in the Kailash Mountain range near the Mansarovar Lake.
- The river flows northwest and enters in Ladakh region in India from a place called **Demchok**, after entering India Indus river flows in between Karakoram and Ladakh range but more closer to the Ladakh range.
- **It is joined by the Zaskar River at Leh.**
- Near Skardu, it is joined by the Shyok at an elevation of about 2,700 m.
- The Gilgit, Gartang, Dras, Shiger, Hunza are the other Himalayan tributaries of the Indus.



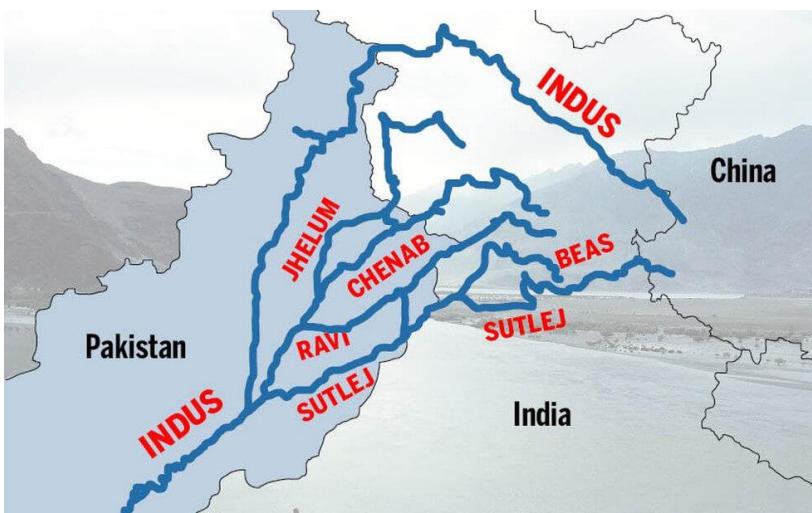
- The Kabul River empties into the Indus River near **Attock, Pakistan**. It is the main river in eastern Afghanistan and the Khyber Pakhtunkhwa province of Pakistan.
- Just above **Mithankot**, the Indus receives from Panjnad (Panchnad), the accumulated waters of the five eastern tributaries—the Jhelum, the Chenab, the Ravi, the Beas, and the Satluj.
- In Sindh Province river accumulates a lot of sediments and forms the Indus river delta before draining into the Arabian sea near Karachi.
- The **blind Indus River Dolphin**, a sub-species of dolphin, is found only in the Indus River.



Left and Right bank tributaries

- Zaskar river, Suru river, Soan river, Jhelum River, Chenab River, Ravi River, Beas river, Satluj river, Panjnad river are its major left-bank tributaries.
- Shyok River, Gilgit river, Hunza river, Swat river, Kunnar river, Kurram river, Gomal River, and Kabul river are its major right-bank tributaries.

Major Tributaries of Indus River



Jhelum River

- It is a tributary of the Chenab River and has a total length of 813km
- The river Jhelum rises from a spring at **Verinag** situated at the foot of the **Pir Panjal** in the southeastern part of the valley of Kashmir in India.
- The **Kishenganga (Neelum)** River, the largest tributary of Jhelum, joins it.
- The Chenab merges with the Sutlej to form the Panjnad River which joins the Indus River at Mithankot
- The waters of the Jhelum are allocated to Pakistan under the terms of the Indus Waters Treaty
- It ends in a confluence with the Chenab in Pakistan.

Chenab River

am Classes

- The Chenab originates from near **the Bara Lacha Pass in the Lahul-Spiti part of the Zaskar Range**.
- Chenab river is formed by the confluence of the Chandra and Bhaga rivers at Tandi located in the upper Himalayas in the Lahul and Spiti District of Himachal Pradesh
- In its upper reaches, it is also known as the Chandrabhaga
- It flows through the Jammu region of J&K into the plains of Punjab in Pakistan
- The waters of the Chenab are allocated to Pakistan under the terms of the Indus Water Treaty
- **Baghliar Dam has been constructed on this river**
- **The river is crossed in J&K by the world's highest railways bridge name Chenab Bridge.**

Ravi River

- The Ravi River originates Dhauladhar range of the Himalayas in the Chamba district of HP. Ravi has its source in Kullu hills near the Rohtang Pass in Himachal Pradesh.
- It follows a northwesterly course and is a perennial river having a total length of about 720km
- The waters of the Ravi River are allocated to India under the Indus Waters Treaty
- The major multipurpose project built on the river is the Ranjit Sagar Dam (Thein dam as it is located in Theinvillage)

- The Ujh river is a tributary of the Ravi River that flows through the Kathua district in the Indian union territory of Jammu and Kashmir.
- Ujh Multipurpose Project is planned to be constructed in Kathua District of Jammu & Kashmir on the River Ujh.
- Shahpurkandi Dam project is located on the Ravi River in Pathankot district, Punjab, downstream from the existing Ranjit Sagar Dam.



Sutlej River

- The Sutlej is sometimes known as the Red River.
- It rises from beyond the Indian borders in the southern slopes of the Kailash Mountain near Mansarovar Lake from Rakas Lake.
- It enters HP at Shipki La and flows in the South-westerly direction through Kinnaur, Shimla, Kullu, Solan, Mandi, and Bilaspur districts.
- It leaves HP to enter the plains of Punjab at Bhakra, where the world's highest gravity dam- Bhakra Nangal Dam, has been constructed on this river.
- The waters of the Sutlej are allocated to India under the Indus Water Treaty b/w India and Pakistan and is mainly used for power generation and irrigation of many large canals draw water from it
- Across the river, there are many hydroelectric and irrigation projects such as the Kol Dam, Nathpa Jhakri project.

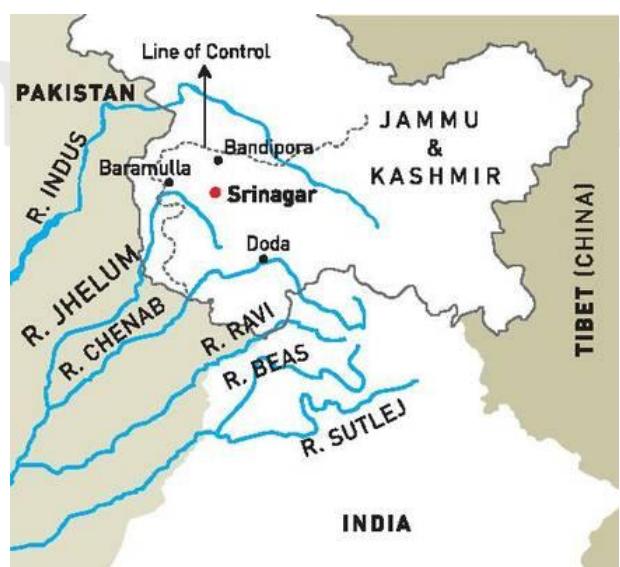
Beas River

- Beas River, an important river of the Indus River System, emerges from Rohtang pass in HP
- The river before entering Pakistan merges with the Sutlej River at Hari-Ke-Pattan in Punjab
- The total length of this river is 460km and the river covers 256km through HP
- **The tourist resorts of Manali is situated on the right banks of the River Beas.**

Indus water treaty

- The waters of the Indus river system are shared by India and Pakistan according to the Indus Water Treaty signed between the two countries on **19th September, 1960**.
- **According to this treaty, India can utilize only 20 per cent of its total discharge of water.**
- Under the treaty signed between India and Pakistan in 1960, all the waters of three rivers, namely Ravi, Sutlej, and Beas (Eastern Rivers) were allocated to India for exclusive use.
- While, the waters of Western rivers – Indus, Jhelum, and Chenab were allocated to Pakistan except for specified domestic, non-consumptive, and agricultural use permitted to India as provided in the Treaty.

LADAKH	
Leh	Indus River
Srinagar	Jhelum River
HIMACHAL PRADESH	
Kullu	Beas River
Manali	Beas River
PUNJAB	
Ludhiana	Sutlej River



Tributaries of Indus – Important Points

Rivers	Origin	Remarks
Sutlej	Manasarovar-Rakas Lakes (Tibet)	<ul style="list-style-type: none"> Parallel to Indus for 400 km before entering India Feeds canal system of Bhakra Nangal project - Bhakra Nangal Dam
Beas	Beas Kund near Rohtang Pass (H.P.)	<ul style="list-style-type: none"> Flows through Kullu & Manali Entirely within India

Rivers	Origin	Remarks
Ravi	West of Rohtang pass, Kullu hills (H.P.) - NCERT	Flows as Indo-Pak border for a particular distance
Chenab	Baralacha La Pass, Himachal Pradesh	<ul style="list-style-type: none"> Largest tributary (1,180 km in India) Formed by 2 streams, Chandra and Bhaga
Jhelum	Verinag, Kashmir	Flows through Srinagar and Wular Lake

Dam

Highest Dam in India	Tehri Dam (Uttarakhand)	River: Bhagirathi River
Longest Dam in India	Hirakud Dam (Odisha)	River: Mahanadi
Oldest Dam in India	Kallanai Dam (Tamil Nadu)	River: Kaveri

- Baglihar Dam – Chenab River- Jammu and Kashmir
- Bassi Dam – Ravi River – Himachal Pradesh
- Bhakra Dam – Satluj – Himachal Pradesh
- Chamera Dam – Ravi River – Himachal Pradesh
- Dulhasti Dam – Chenab River – Jammu and Kashmir
- Karchham Wangtoo Dam – Ravi River – Himachal Pradesh
- Kishanganga Dam – Kishanganga river – Jammu and Kashmir
- Kol Dam – Satluj River – Himachal Pradesh
- Largi Dam – Beas River – Himachal Pradesh

- Malana Dam – Ravi River – Himachal Pradesh
- Nathpa Jhakri Dam – Satluj River – Himachal Pradesh .
- Nimoo Bazgo River – Indus River – Jammu and Kashmir
- Pakal Dul Dam – Marusudar river – Jammu and Kashmir
- Pandoh/Pong Dam – Beas River – Himachal Pradesh
- Ranjit Sagar Dam – Ravi River – Punjab
- Salal Dam – Chenab River – Jammu and Kashmir
- Uri Dam – Jhelum River – Jammu and Kashmir

Parcham Classes

MCQ

In the end of its mountainous journey at Attock, Indus river is joined by which river from Afghanistan?

- a) Amu Darya
- b) Kabul river
- c) Helmand river
- d) Hari river

From where does the Chenab originate?

- a) Rohtang Pass
- b) Khardung La
- c) Nathu La
- d) Bara Lacha Pass

Which of the following is not the tributaries of the Indus River?

- A. Shyok
- B. Gilgit
- C. Zaskar
- D. Luni

Consider the following statement(s) is/are related to the Indus River System

- I. It is known as Singi Khamban or the Lion's mouth in Tibet.
- II. It originates from a glacier near Bokhar Chu in the Kailash Mountain range.

Which of the above statement(s) is/are correct?

- Code:
- A. Only I
 - B. Only II
 - C. Both I and II
 - D. Neither I nor II

Which Indian river merges the Ravi?

- a) Indus
- b) Jhelum
- c) Chenab
- d) Beas

1	b
2	d
3	d
4	c
5	c



Parcham Classes